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	Application Number	10/728,862	
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	First Named Inventor	Jungho Park	
	Art Unit	3679	
	Examiner Name	Greg Binda	
Total Number of Pages in This Submission	99	Attorney Docket Number	

ENCLOSURES (Check all that apply)			
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Jungho Park	
Signature		
Date	11/21/2005	

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PATENT & TRADEMARK OFFICE
Applicant's Response to the Office Action Dated 10/26/2005

Non-Responsive Amendment

I. In response to the section 1 of the Office Action Summary dated 10/26/2005, the applicant objects to the notice of non-responsive amendment for the following reasons:

- a. Although the major novelty of this invention is in the multi-roller ball, this invention has been about a CV (constant velocity) joint since it involved not only the balls but also the cage. This invention requires a special cage that has web grooves (4i in Figures 8 and 9; claim 7 in the claims section). No other invention has such cage that features the web grooves.
- b. The multi-roller ball and the cage with the web grooves are essential members of a CV joint (this invention). They are not like a ball bearing (sub-combination) that can be applied to any mechanical systems (distinct combinations). Therefore, the relationship between the multi-roller ball and the CV joint is the part and the assembly in the single invention. In other words, the relationship is not about the two or more related inventions as covered by the MPEP § 806.05 "Related Inventions".
- c. Like this invention, there are many other CV joint inventions that modify a single member (e.g. cage) of a CV joint. The section 2 of this document lists such examples. The claims of all those inventions begin with "A universal joint comprising ..." even though the actual novelty lies in a single member/part of a CV joint. It is because a member of a CV joint cannot be separated as a subcombination of a CV joint. In other words, a CV joint does require the particulars of its members.
- d. The item g (Thomas, US 6,206,785) of this section 2 is about a CV joint having a two-piece cage. Even though the cage has a two-piece construction, the cage is not a subcombination but still a member of a CV joint. Thus a multi-roller ball is not a subcombination but merely a member (part) of a CV joint.
- e. The multi-roller ball and the cage with web grooves are strictly for constant velocity joints. It is both unnecessary and impractical to apply the multi-roller ball to a ball bearing. The balls for a CV joint have different functionalities from those for a ball bearing. The balls of a CV joints undergo a sliding contact against other members, while the balls in a ball bearing simply rolls between the two races. In addition, the cages for constant velocity joints have unique features that are not seen in ball bearing cages: an elongated cage window; a point contact against a ball